GAO

and Housing Subcommittee, Committee on Government Operations, House of Representatives Report to the Chairman, Employment

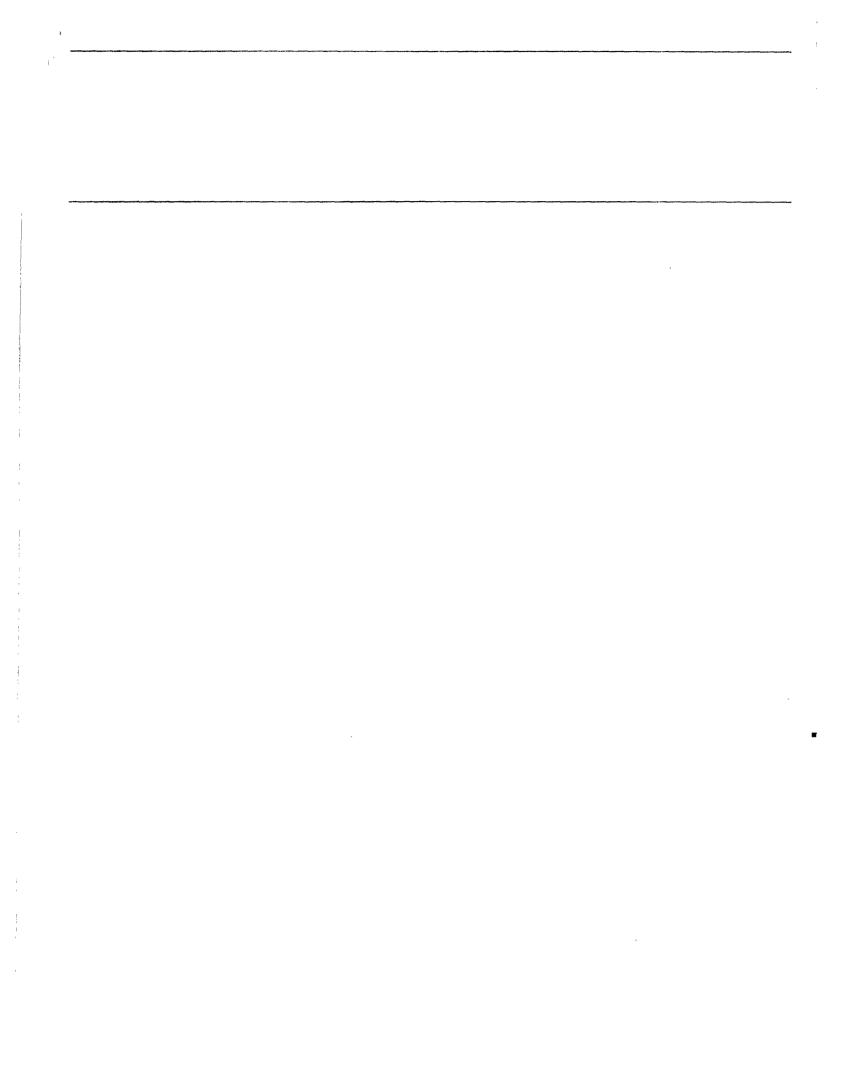
December 1992

# PENSION PLANS

Against Government Hidden Liabilities Insurance Program Increase Claims









United States General Accounting Office Washington, D.C. 20548

### **Human Resources Division**

B-249213

December 30, 1992

The Honorable Tom Lantos Chairman, Employment and Housing Subcommittee Committee on Government Operations House of Representatives

This report responds to your request that we review the factors that can cause the actual or potential claims against the Pension Benefit Guaranty Corporation (PBGC) to be greater than the unfunded liabilities reported by the plans it insures.

This report identifies numerous factors that cause plan liabilities to increase, or plan assets to decrease, in the year or two before the plan terminates.

As agreed with your office, we are sending copies of this report to the Ranking Minority Member of your Subcommittee; the Executive Director of PBGC; and the Secretaries of Labor, Commerce, and Treasury, as Chair and members, respectively, of the Corporation's Board of Directors. Copies will be sent to others upon request.

Sincerely yours,

Joseph F. Delfico

Director, Income Security Issues

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# **Executive Summary**

### Purpose

The Employee Retirement Income Security Act of 1974 (ERISA) established an insurance program, administered by the Pension Benefit Guaranty Corporation (PBGC), to protect the benefits of participants in most defined benefit pension plans. Estimates of plans' unfunded liabilities made by plans and PBGC often differ. The Congress has expressed concern that the level of underfunding in many ongoing plans may be greater than plans report (that plans may have hidden liabilities) and that, if sufficient numbers of these plans terminate, PBGC may not be able to pay the claims without drawing on federal revenues.

In response to a request from the Chairman, Employment and Housing Subcommittee, House Committee on Government Operations, we (1) reviewed the factors that cause hidden liabilities, (2) assessed the impact of these factors on recent claims against the pension insurance program, and (3) analyzed PBGC's ability to control these factors.

### Background

Pension plans are required to file an annual report with the Internal Revenue Service (IRS) that lists, among other items, the estimated value of their assets and liabilities. Subtracting a plan's estimated liabilities from its assets indicates whether it is fully funded (has a zero or positive balance) or has unfunded liabilities (has a negative balance). The plan's liabilities are estimated using certain interest rate and other actuarial assumptions that influence the size of the resulting liabilities.

When a defined benefit pension plan terminates with insufficient assets to cover its benefit obligations, PBGC trustees the plan—it assumes the plan's assets and becomes responsible for paying guaranteed benefits to participants. As a part of the process, PBGC independently values the assets it receives and liabilities it is responsible for paying. The unfunded liability calculated by PBGC (the claim against PBGC) often exceeds the unfunded liability reported by the plan in its most recent annual filing with IRS. GAO defines this difference as a hidden liability.

GAO studied 44 trusteed plans that terminated from 1986 to 1988 to determine the sources and sizes of hidden liabilities. These 44 plans, each with a claim of \$1 million or more against PBGC, accounted for 96 percent of the claims against PBGC for this period. (See ch. 1.)

<sup>&</sup>lt;sup>1</sup>In such plans, pension benefits are generally based on a formula that takes into consideration job tenure and/or earnings.

<sup>&</sup>lt;sup>2</sup>An unfunded liability measures the extent that plan liabilities exceed plan assets.

### Results in Brief

The federal government's exposure to unfunded liabilities in private pension plans is much larger than plans have indicated on their annual reports to IRS. When a pension plan terminates with insufficient assets, PBGC is likely to absorb unfunded liabilities considerably greater than the plan reported.

PBGC has few tools to control its exposure from hidden liabilities. Plan sponsors with financial difficulties know that PBGC will protect the guaranteed pensions of their workers no matter how large the unfunded liabilities in their plans.<sup>3</sup> Financially troubled sponsors sometimes take actions that increase the burden on PBGC, such as raising benefits in lieu of increasing wages or failing to make contributions to their plans. Although PBGC could benefit from additional tools to control its hidden liabilities, such tools impose costs on plan participants, plan sponsors, or the federal government.

### GAO's Analysis

### Hidden Liabilities

PBGC determined that the 44 plans in this study had aggregate unfunded liabilities at termination of \$2.7 billion (\$4.3 billion in liabilities, and \$1.6 billion in assets). These unfunded liabilities, which represent the claim against PBGC, are \$990 million, or 58 percent, higher than the \$1.7 billion in unfunded liabilities reported by the 44 plans on their last, pretermination annual filings with IRS. Eighty percent of the \$990 million hidden liabilities is due to PBGC's higher estimate of plan liabilities caused by PBGC's use of different actuarial assumptions to value plan liabilities, the payment of shutdown or special early retirement benefits found primarily in steel industry plans, and earlier-than-anticipated retirements of plan participants. Twenty percent of the hidden liabilities is due to PBGC's receipt of fewer assets than reported by the plans. The lower asset levels were caused by the continued payment of benefits and missed contributions by plan sponsors. (See ch. 2.)

<sup>&</sup>lt;sup>3</sup>PBGC's ability to pay benefits, at any given point in time, is limited to assets on hand plus a \$100 million line of credit with the Department of Treasury.

### Differing Actuarial Assumptions Have a Large Effect on Estimated Plan Liabilities

PBGC uses three actuarial assumptions—interest rates, mortality rates, and retirement age—when calculating a plan's liabilities. The interest rate assumption had the greatest impact on liabilities. When GAO adjusted reported plan liabilities in the 44 plans to the generally lower interest rates used by PBGC at the plans' terminations, unfunded liabilities increased 31 percent.<sup>4</sup>

One reason for a difference in rates is that PBGC regularly adjusts its interest rates to reflect changes in the market price of private insurance companies' annuity contracts. Plan rates tend to be more stable over time, in part, to help plan sponsors anticipate the contributions they will need to make to their plans. (See ch. 2.)

To test the sensitivity of estimated liabilities to selected actuarial assumptions, GAO adjusted the 1987 interest rate and retirement age assumptions for 17,253 ongoing large (100 or more participants) plans. GAO found estimated unfunded liabilities in the plans nearly doubled from \$14 billion to \$26 billion when it adjusted interest rates to PBGC's January 1987 interest rates. However, reducing the retirement age assumptions by 1 year increased unfunded liabilities only \$4 billion, or 28 percent.

### Shutdown Benefits Increase PBGC Liabilities

Shutdown benefits are paid by some plans when companies close plants or downsize. These benefits are not prefunded and are not fully valued in the estimate of plan liabilities until they commence. If a plan terminates shortly after shutdown benefits originate, the sponsor will not have had time to fund them. Shutdown benefits paid before the plan terminates consume plan assets accumulated to pay other plan benefits. Thus, shutdown benefits increase the plan's hidden liability from both sides—they cause a sudden increase in plan liabilities and drain plan assets. (See ch. 2.)

PBGC estimates that more than 25 percent of its deficit may be attributable to shutdown benefits from steel industry plans. Ten of the 25 steel plans in this study had shutdown benefits in effect at termination. Shutdown benefits continue to pose a threat to PBGC because a large portion of its

<sup>&</sup>lt;sup>4</sup>Calculated plan liabilities rise when interest rate assumptions decline and fall when interest rates rise.

<sup>&</sup>lt;sup>5</sup>PBGC's deficit is determined by subtracting its liabilities (primarily the present value of future benefits) from its assets. As of September 30, 1991, PBGC reported a deficit of \$2.5 billion in its single employer program.

current exposure is from plans with shutdown-type benefit provisions in the steel, automobile, and tire and rubber industries.

### Unpaid Contributions Lower Plan Asset Levels

Sponsors experiencing financial difficulties often fail to make required contributions to their pension plans. The assets of the 44 plans GAO reviewed declined by \$200 million between their last IRS filing and termination, primarily because of benefit payments. The reduction in assets would have been \$45 million less if sponsors had made all minimum required contributions during this period. (See ch. 2.)

# PBGC Lacks Tools to Limit Claims

PBGC is aware of the hidden liability problem and attempts to estimate its true exposure by adjusting reported plan liabilities to its own interest rate. It makes other adjustments when data permit.

Even when it can identify them, PBGC has few tools to control its exposure from plans with hidden liabilities. The premiums PBGC collects insure plans against any shortfall in plan assets, up to the maximum guarantee per participant. Because the pensions of plan participants are insured by PBGC, plan sponsors experiencing financial difficulties sometimes take actions that increase the exposure and risk to PBGC. (See ch. 3.)

At present, PBGC's only means of restricting its losses in these cases are to persuade the sponsor to better fund the plan or to terminate the plan, which PBGC can do only in limited circumstances. PBGC could benefit from additional tools to control its hidden liabilities, but such tools impose costs on plan participants, plan sponsors, or the federal government. However, not providing additional tools portends increased premiums from all plan sponsors to pay for the broken pension promises of a few.

### Recommendations

GAO is making no recommendations.

### **Agency Comments**

PBGC agreed with GAO's findings in this report. (See app. II.) In its written comments, PBGC asked that GAO (1) support its efforts to gain access to data necessary to assess its exposure and risk and (2) discuss the costs of not passing legislation to control the agency's hidden liability. GAO agrees that PBGC has a problem obtaining timely and accurate data to assess its risks and exposure. For example, the plan data on the annual report to IRS is often more than 18 months old when the report is filed. Because

**Executive Summary** 

unfunded liabilities tend to increase as plans approach termination, the unavailability of current data makes it difficult for PBGC to assess its current exposure. (See app. II.) GAO also included a discussion in chapter 3 of the costs of not passing legislation to protect PBGC from hidden liabilities. PBGC made a few technical comments, mostly for clarification, that are incorporated where appropriate.

7	GAO/I	HRD-93-7 Hidden Liabilities

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### **Abbreviations**

ERISA	Employee Retirement Income Security Act of 1974
IRS	Internal Revenue Service
OBRA 87	Omnibus Budget Reconciliation Act of 1987
PBGC	Pension Benefit Guaranty Corporation
PPA	Pension Protection Act

## Introduction

The Employee Retirement Income Security Act of 1974 (ERISA) was enacted to protect the pension benefits of participants in private, defined benefit pension plans. A defined benefit plan pays a retirement benefit based on a specific formula that generally takes into account employee earnings and/or job tenure. ERISA prescribed vesting and funding standards for defined benefit pension plans. It also established a program to insure the payment of earned benefits, up to a maximum guarantee level, for participants in defined benefit plans that terminated with unfunded liabilities. Today, the insurance program, administered by the Pension Benefit Guaranty Corporation (PBGC), covers about 40 million participants in 85,000 plans. As of September 30, 1991, PBGC reported a deficit (the present value of future benefits PBGC is responsible for paying less its assets) in its single employer program of \$2.5 billion.

### Level of Funding Controlled by Plan Sponsors

Plan sponsors control the level of contributions made to their pension plans (subject to ERISA's funding standards). They, or more usually their actuaries, estimate plan liabilities using characteristics of plan participants and reasonable assumptions about the anticipated experience of the plan. The funding method selected determines what portion of the total estimated liabilities should be funded in the current period.<sup>4</sup>

Plans are required to file with the Internal Revenue Service (IRS) an annual report (Form 5500) that lists, among other items, the value of the assets in the plan's portfolio and an estimate of the plan's accrued liabilities (the present value of future benefits that have been earned to date).<sup>5</sup> Subtracting the estimated liabilities from assets indicates whether the plan

<sup>&</sup>lt;sup>1</sup>ERISA also provides certain protections for participants in other pension and welfare benefit plans.

<sup>&</sup>lt;sup>2</sup>ERISA requires that plan participants, after meeting certain requirements, be given a nonforfeitable right to the pension benefits they have earned, even if they leave the employment of the plan sponsor before retirement. These nonforfeitable benefits are known as vested benefits, and the requirements, as vesting standards. Funding standards define the minimum (and maximum) contributions the plan sponsor must (may) make to the plan to ensure that pension promises will be honored.

<sup>&</sup>lt;sup>3</sup>Unfunded liability measures the extent that plan liabilities exceed plan assets.

<sup>&</sup>lt;sup>4</sup>Some funding methods are designed to ensure that contributions are a relatively stable percentage of the plan sponsor's annual payroll cost. Others are designed for larger contributions in the early years of the plan so that earnings on the plan's portfolio contribute a relatively large share of total plan assets. Still others are designed for smaller contributions early on and larger contributions later in the plan life when the plan sponsor will, theoretically, be well established and better able to make large contributions. All funding methods are designed to ensure that the plan eventually reaches a full funding level.

<sup>&</sup>lt;sup>5</sup>The actuarial assumptions used to calculate accrued liabilities are selected on the assumption that the plan will be in existence for the foreseeable future. They are not necessarily the same assumptions the plan's actuary or PBGC would use to calculate the plan's liabilities at termination.

is fully funded (has a zero or positive balance) or has unfunded liabilities (has a negative balance).

Most plans report asset levels sufficient to cover their liabilities. Several thousand plans report unfunded liabilities, however. PBGC estimates that about \$40 billion in unfunded liabilities existed at the end of fiscal year 1991 in the plans it insures. Plans with unfunded liabilities are allowed by law to amortize the unfunded amount over a period of years that varies with the cause of the underfunding. For example, plans with unfunded liabilities in 1974, when ERISA was enacted, were allowed to amortize that unfunded amount over a 40-year period. This period is not yet half over, and many of these plans remain underfunded. A second example is benefit increases made after 1973, which can be amortized over a 30-year period. ERISA specifies the maximum number of years a sponsor can take to amortize the unfunded liabilities from a given cause. The sponsor, if it desires, can amortize this amount over a shorter period than prescribed by ERISA.

A modestly underfunded plan whose sponsor is regularly making required contributions<sup>6</sup> will not usually become subjected to scrutiny by PBGC. However, if a sponsor is under financial stress, its willingness and ability to make required contributions to the plan becomes questionable, and PBGC becomes concerned that it may have to take over the plan at some future date. PBGC estimates that \$13 billion, about one-third of the estimated unfunded liabilities it currently faces, is in plans with sponsors that are financially troubled.

### PBGC Pays Benefits of Terminated Underfunded Plans

When a defined benefit pension plan terminates with insufficient assets to pay its vested benefit obligations, PBGC trustees the plan—it assumes the plan's assets and becomes responsible for paying guaranteed benefits to its participants.<sup>7</sup> (PBGC does not trustee terminated fully funded plans.) The plan's asset insufficiency represents a claim against the insurance program. The assets PBGC uses to pay guaranteed benefits comes from four sources—assets of terminated plans, premiums PBGC charges for its

<sup>&</sup>lt;sup>6</sup>Required contributions fund benefits accruing during the year and a specified portion of the plan's unfunded liability. Funding standards are contained in paragraphs 412(b) and 412(l) of the Internal Revenue Code.

<sup>&</sup>lt;sup>7</sup>PBGC does not insure all vested benefits. Benefits above a specified maximum amount, a portion of recent benefit increases, and some supplemental benefits are not guaranteed by PBGC. In 1992, the maximum benefit PBGC will guarantee is \$2,352.27 per month. This guarantee level is reduced for those younger than age 65 and those selecting a joint and survivor pension option.

insurance protection, claim recoveries from sponsors of terminated plans, and income from PBGC's investment portfolio.

Bankruptcies of plan sponsors cause most of the plan terminations that PBGC trustees. A sponsor can instigate a plan termination without being in bankruptcy by demonstrating either that it will go bankrupt unless the plan is terminated or that its pension costs are unreasonably burdensome because of a decline in employment covered by the plan. PBGC can terminate a plan with unfunded liabilities under any of the following conditions:

- the plan has not met ERISA's minimum funding standards,
- the plan is unable to pay benefits when due,
- the plan has made a distribution of \$10,000 or more to a substantial owner, leaving the plan with unfunded vested benefits, or
- PBGC will suffer an unreasonable long-run loss if the plan is not terminated.

Upon termination, PBGC evaluates the plan's assets and estimates the liabilities it will be responsible for paying. PBGC calculates plan liabilities on a termination, or plan liquidation, basis. The valuation of these liabilities is based on the current market price of an annuity that could be purchased to provide PBGC-guaranteed benefits to plan participants (see app. I). PBGC valuations of both assets and liabilities often differ from those most recently reported by the plan to IRS.

### Hidden Liabilities Increase Claims Against PBGC

We define a "hidden liability" to be the additional unfunded liability, calculated by PBGC when a plan terminates, that was not reported by the plan on its last annual pretermination filing with IRS.

A hidden liability can arise from several causes relating to increases in plan liabilities or decreases in plan assets. Differences in the actuarial assumptions used by PBGC and the plan can cause hidden liabilities. Some plan sponsors may use liberal assumptions about their anticipated experience to reduce required plan contributions. Hidden liabilities may arise as a consequence to such sponsor actions as downsizing. Whatever the source, hidden liabilities can increase potential future claims against the insurance program. These greater future claims may necessitate federal government intervention should PBGC become unable to pay guaranteed benefits.

PBGC is aware of the hidden liability problem. However, some interested parties including plan participants and plan sponsors may incorrectly believe that the funding status reported on the Form 5500 represents plans' termination liabilities to PBGC.

PBGC takes its exposure from hidden liabilities into account in several ways. It includes the claims from probable terminations on its financial statement. For example, approximately \$0.8 billion of the \$2.5 billion single employer program deficit reported by PBGC in its 1991 annual report represented net claims for probable terminations. PBGC also discloses its possible exposure from underfunded plans of financially troubled sponsors after adjusting plan liabilities to its own interest rates. Through its recently created Corporate Finance and Negotiations Department, PBGC also keeps a close watch on financially troubled sponsors.

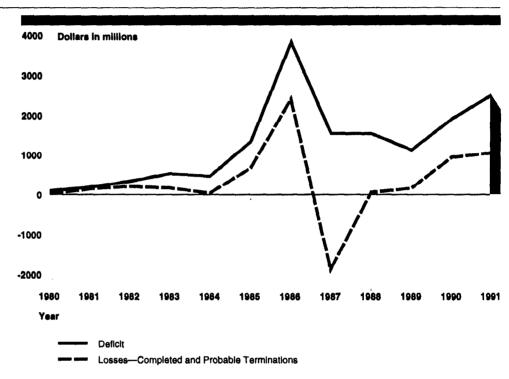
### PBGC's Claims Experience

PBGC's data show that from fiscal year 1975 through fiscal year 1991 it trusteed 1,582 single employer plans that had assets insufficient to pay their participants all promised benefits. At the end of fiscal year 1991, PBGC was in the process of trusteeing an additional 62 terminated underfunded plans. The trends from 1980 to 1991 in PBGC's deficit and its losses from actual and probable terminations are shown in figure 1.1. The amounts shown in figure 1.1 for fiscal year 1986 include \$2 billion for three large plans that were later returned to the plans' sponsor. The effect of this return are reflected in the 1987 amounts. Figure 1.1 shows that in the past decade, PBGC has suffered two 2-year periods of substantial loss, 1985-86 and 1990-91.

Burkey along

<sup>&</sup>lt;sup>8</sup>PBGC becomes trustee of terminated underfunded pension plans either through agreement with the plan administrator or through a court order.

Figure 1.1: PBGC Deficit and Losses From Completed and Probable Terminations, 1980-91



Note: Values for 1986 include three plans with over \$2 billion in underfunding. These plans were later restored to their sponsor. PBGC removed the liability for these plans from its books in 1987.

Source: PBGC, Annual Reports for 1989 and 1991.

A large portion of the claims made against PBGC have come from a few tremendously underfunded plans. For example, 259 underfunded plans terminated during the 1986-88 period, but 44 of these plans accounted for almost 96 percent of the claims. (See table 1.1). More strikingly, one of these plans accounted for 42 percent of the total claims against the insurance program for this 3-year period. Another four plans accounted for an additional 44 percent. The three largest of these five plans, accounting for 72 percent of the total claims against PBGC for the period, were later restored to the plans' sponsor.

Table 1.1: Distribution of Underfunded Plans Terminating in 1986-88 by Trustee Status and Size of Claim

		Plans		Claims	3
Trustee status	Claim size	Number	Percent	Amount	Percent
Not trusteed	Under \$1 million	66	25.5	\$8.2	0.3
manage and a supplying the first control of the supplying	\$1 million or more	9	3.5	79.4	2.8
Subtotal		75	29.0	87.6	3.1
Trusteed	Under \$1 million	140	54.1	36.4	1.3
Make a different and the second and appropriate the second and an experience of the second and an experience and an expe	\$1 million or more <sup>a</sup>	44	17.0	2,688.6	95.6
Subtotal*		184	71.0	2,725.0	96.9
Total all plans		259	100.0	\$2,812.6	100.0

\*Includes three plans with \$2 billion in claims that were later restored to the plans' sponsor.

# Objectives, Scope, and Methodology

Dollars in millions

In response to a request by the Chairman, Employment and Housing Subcommittee, House Committee on Government Operations, we reviewed the factors that cause hidden liabilities, assessed the impact of these factors on recent claims against the pension insurance program, and analyzed PBGC's ability to control these factors.

The Congress has expressed concern that the level of underfunding in many ongoing plans may be greater than reported and that, if sufficient numbers of these plans terminate, PBGC may not be able to pay the claims without drawing on federal revenues. We testified in October 1991 and in August and September 1992 that, while we are very concerned with PBGC's current deficit and looming potential claims, PBGC should be able to pay its benefit obligations in the short run without assistance from the federal government.<sup>9</sup>

To determine the factors that cause hidden liabilities, we interviewed officials at PBGC and experts in the pension industry. We reviewed data maintained by PBGC and the Department of Labor on the 44 trusteed plans with the largest claims against PBGC for calendar years 1986-88. PBGC calculations showed that each of these 44 plans, at termination, had unfunded liabilities of at least \$1 million. The \$2.7 billion in claims against PBGC from these 44 plans is 95.6 percent of PBGC's estimated total claims

<sup>&</sup>lt;sup>9</sup>Defined Benefit Pensions: Hidden Liabilities From Underfunded Plans and Potential New Obligations Confront PBGC (GAO/T-HRD-92-6, Oct. 31, 1991); Financial Condition of the Pension Benefit Guaranty Corporation (GAO/T-HRD-92-52, Aug. 11, 1992); and Improving the Financial Condition of the Pension Benefit Guaranty Corporation (GAO/T-HRD-92-60, Sept. 25, 1992).

filed against the insurance program for the 1986-88 period. We did not independently verify PBGC's estimates.

From Labor, we obtained available data from the plans' annual IRS Form 5500 filings for 1981 to the last year available before plan termination. Schedule B of the form contains data on plan assets, the present value of accrued benefits for retirees and nonretired plan participants, actuarial assumptions, funding account information, and other related data.

The liabilities listed on the Form 5500 assume that the plan is an ongoing entity, not a terminating one. For our study, we would have preferred that the calculations had been made on a termination basis, but plans are not required to make this calculation. We believe that, for this time period, the Form 5500 liability data were the best publicly available estimates of the plans' termination liabilities, and, because of the additional data the form and its Schedule B contain, the best source of pretermination data for our study.

The data we obtained from PBGC and Labor allowed us to determine the effects of interest rates, mortality rates, and unpaid contributions on the hidden liabilities in these plans. We were able to make less definitive statements about the impact of other actuarial assumptions and shutdown benefits, special early retirement benefits found primarily in the steel, automobile, and tire and rubber industries, because all the data needed to make accurate estimates were not available. We did not obtain data on the makeup of the plans' asset portfolios, therefore, we were unable to determine how the portfolios were affected by the October 1987 stock market crash.

We used data on the 44 plans to estimate how the plans' and PBGC's use of different interest and mortality rates affected estimated plan liabilities. We had insufficient data to perform a similar analysis for the retirement age assumption. However, we discuss how actuarial theory suggests changes in the retirement age assumption can be expected to affect plan liabilities.

To further test the effect of actuarial assumptions, we developed a model to calculate the present value of a stream of benefit payments beginning at retirement for people younger than the retirement age. By varying actuarial assumptions in our model, we estimated how sensitive the present value calculation is to changes in the three assumptions we focus on in this study.

Finally, we estimated how the use of different actuarial assumptions by plans and PBGC affected hidden liabilities in existing pension plans. To do this, we used IRS's data file on the plans' 1987 annual reports to calculate how varying the interest rate and retirement age assumptions affected the aggregate estimated liabilities and funding levels of large (100 or more participants) defined benefit plans.<sup>10</sup>

Using data from the 44 terminated underfunded plans, we identified other sources of hidden liability. We determined the number of sponsors that failed to make required contributions to their plans, the size of these missed contributions, and the effect of them on hidden liabilities and on the total claims against PBGC. We also identified plans with shutdown benefit provisions in effect at termination, but, given the limited data available, we were unable to determine how much shutdown benefits contributed to hidden liabilities or to the total claims against PBGC.

Major pension legislation, affecting the way underfunded plans are treated, was passed in 1986 (the Single Employer Pension Plan Amendments Act) and 1987 (the Pension Protection Act (PPA)). We have not tried to assess the effects of these laws in this study, but we do discuss specific provisions that address problems we identify as contributing to hidden liabilities.

Our work was performed in accordance with generally accepted government auditing standards between August 1990 and October 1992.

<sup>&</sup>lt;sup>10</sup>We used the 1987 data file because accrued liabilities, as calculated by pension plans, are not coded on the files for more current years. Labor added this liability data to the 1988 file but had to impute liabilities for about 40 percent of the cases.

The 44 plans in our study had aggregate liabilities at termination of \$4.3 billion and assets of only \$1.6 billion. The \$2.7 billion in claims against the Pension Benefit Guaranty Corporation includes \$990 million in hidden liabilities. That is, the claims against the PBGC were \$990 million, or 58 percent larger than the \$1.7 billion in unfunded liabilities reported by these plans on their last, pretermination annual filings with the Internal Revenue Service (see table 2.1). Hidden liabilities were present in 42 of the 44 plans.

Of the hidden liabilities in these 44 plans, 81 percent resulted from increases in plan liabilities, and 19 percent resulted from decreases in plan assets. Plan liabilities calculated by PBGC were higher than those reported by 39 plans. Plan assets received by PBGC were lower than those reported by 35 plans. For 30 plans, PBGC both calculated higher liabilities and received less assets than reported by the plans.

Table 2.1: Source and Size of Hidden Liabilities for 44 Plans Terminating in 1986-88

Source	Reported by plans	Calculated by PBGC	Hidden liabilities	Percent change from reported amount
Liabilities	\$3,464.9	\$4,262.2	\$797.3	23.0
Assets	1,766.5	1,573.6	192.9	10.9
Underfunding	1,698.4	2,688.6	990.2	58.3

PBGC calculated higher liabilities than plans reported because

- it used different actuarial assumptions including lower interest rates than were used by most of the 44 plans;<sup>1</sup>
- some plans began paying shutdown benefits after their last annual report filing; and
- other factors, such as additional benefits earned by active workers, earlier-than-anticipated retirements of participants, or benefit increases initiated after the plans' last IRS filings, may have come into play.

Four plans had no assets at termination, even though they reported combined assets of almost \$4 million on their last pretermination annual reports. Assets received by PBGC were lower than the last amounts reported by 35 of the 44 plans because

<sup>&</sup>lt;sup>1</sup>See appendix I for a discussion of why lowering the interest rate used to value plan liabilities increases the size of the estimated liabilities.

- more benefits were paid than anticipated:
- most plan sponsors failed to make all required contributions to their plans;
   and
- of other factors, such as inadequate minimum funding standards, investment portfolio losses, and fiduciary breaches.

The benefit payments that reduce plan assets can include lump sum payments (the present value of the plan participants' future benefits is paid in one payment) or annuity purchases (the plan contracts with an insurance company to pay the participants' future benefits). In each instance, plan liabilities, as well as assets, will decrease. The decline in liabilities will not necessarily equal the decrease in assets, however. The lump sum payment can be calculated using actuarial assumptions different from those used to calculate plan liabilities. Lump sum payments can also be made for benefits not guaranteed by PBGC. The payment to the insurance company for the annuity purchase will include components for the insurance company's administrative costs and profit may also be calculated using actuarial assumptions that differ from those used by the plan to calculate its liabilities, and may include benefits not guaranteed by PBGC.

### Differences in Actuarial Assumptions Cause Liability Estimates to Vary Widely

Commonly, PBGC and plan sponsors each use a different set of actuarial assumptions to calculate plan liabilities. This can lead to large differences in estimated plan liabilities. Our analysis focuses on the three assumptions used by PBGC—interest rates, mortality rates, and retirement age. The mortality rate and retirement age assumptions used by PBGC are set by regulation. PBGC's interest rate assumptions are calculated monthly and are based on current annuity prices of private insurance companies. The actuaries hired by the sponsors of the plans in our sample were free to select their own reasonable values for these three assumptions. The assumptions used by the 44 plans almost always differed from those used by PBGC.

<sup>&</sup>lt;sup>2</sup>The mortality rates PBGC uses are set by regulation and are higher than those used by most plans. This leads to lower calculated plan liabilities, other things equal. To offset the effect of its mortality rates, PBGC's interest rates must be lowered somewhat from market rates. When PBGC's interest rates are used in conjunction with its mortality rates, the calculated plan liabilities closely approximate what it would cost the plan sponsor to purchase a group annuity for his participants from a private insurance company. See appendix I for a detailed discussion of how PBGC's interest rates are set.

<sup>&</sup>lt;sup>3</sup>All actuarial assumptions used by a plan actuary are required to reflect his or her best estimate of the future experience of the plan. Beginning with the 1988 plan year, the actuary must select an interest rate for calculating the plan's accrued liabilities (called "current liabilities" in the Omnibus Budget Reconciliation Act of 1987) from a range of rates specified by the Secretary of the Treasury.

The PBGC assumptions are important because they are used to determine the unfunded guaranteed liabilities of a terminated plan. This PBGC-determined underfunding is what PBGC tries to recover from the plan sponsor, typically through court proceedings.

### Interest Rate Differences Account for Large Share of Hidden Liabilities

Of the three actuarial assumptions, the interest rate assumption had the greatest effect on plan liabilities in the 44 plans we studied. The higher the interest rate assumption, the lower the calculated plan liabilities, other things being equal.

A model we developed showed that a 1-percentage-point increase in the interest rate assumption decreased the liability estimate for nonretired participants by about 6 to 65 percent, depending on the retirement age and mortality assumptions used and the current age of the plan participant. For retired participants, the same interest rate increase decreased the liability estimate by about 7 percent or less. This model indicated that, for typical values of retirement age, mortality, and participant population age structures, an interest rate increase of 1 percentage point will lead to about a 10- to 20-percent decrease in calculated plan liabilities.

We adjusted the interest rates used by the 44 plans on their IRS filings to PBGC interest rates in effect at the time they terminated. This adjustment increased the liabilities of the plans by 31 percent, or almost \$1.1 billion. More than 80 percent of this increase occurred in three plans. These plans calculated their liabilities using an interest rate assumption that was one-third higher than the rate used by PBGC. The largest percentage increases in calculated liabilities (98 and 85 percent) were for two plans of one sponsor who used interest rates in excess of 12 percent to calculate liabilities, while PBGC used a 7.5-percent assumption.

<sup>&</sup>lt;sup>4</sup>The actuarial model determines the present value of an individual annuity. The present value will depend on (1) the age of the individual, (2) the assumed retirement age, (3) the interest rate or rates used to discount future payments to the present, and (4) the mortality rate assumptions.

<sup>&</sup>lt;sup>6</sup>The \$1.1 billion increase in liabilities from this interest rate adjustment is greater than the total \$797 million increase in liabilities calculated by PBGC for several reasons. PBGC's interest rates are lower than the market rate of interest to offset the effects of PBGC's mortality rate assumptions. Because we did not adjust for the mortality rates also, this increase is larger than PBGC would calculate when it adjusted for both interest and mortality rates. In addition, 10 plans in our sample either purchased annuities for some of their participants or made lump sum payouts. Each of these options reduced both the liabilities and assets received by PBGC for these plans.

### Changing Interest Rate Assumptions Affects Liability Estimates

Twenty-seven of the 44 plans changed their interest rate assumption between 1981 and the year the plan terminated. Six plans changed this assumption more than once. The interest rate assumption for 21 of these 27 plans was higher on their last IRS filing than on their 1981 filing; if other assumptions remained unchanged, this would lower the plans' calculated liabilities. We cannot conclude, however, that these plans increased their interest rate assumptions as a way of reducing their apparent liabilities, because 17 of the 21 increased their rates in 1982 or 1984, years with high interest rates.

PBGC interest rate assumptions, closely following changes in the market interest rate, changed 38 times between January 1981 and January 1986 and an additional 16 times in 1986-88. Plan rates tend to be more stable over time—in part because they reflect the best estimate of the plan's future experience, which is not necessarily strongly tied to current market interest rates, in part because they are only set once each year, and in part because the stability helps plan sponsors anticipate their yearly pension costs. If interest rates are falling, the difference in interest rate assumptions used by plans and PBGC will tend to increase and result in hidden liabilities for plans that terminate.<sup>6</sup>

### Hidden Liabilities From Interest Rates Limited by 1987 Law

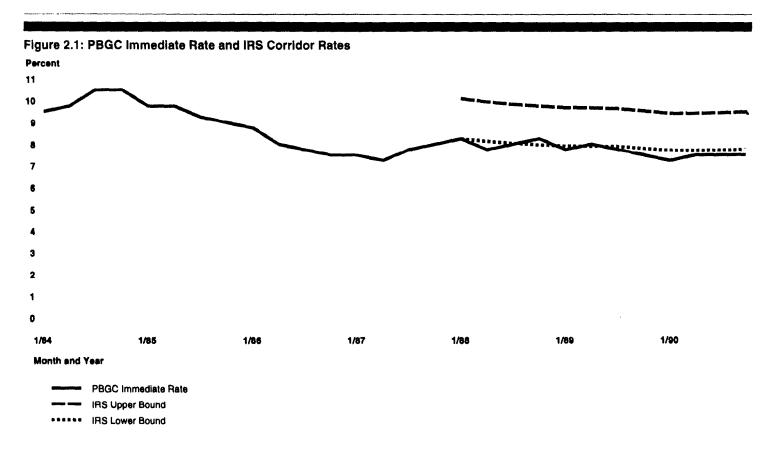
The Omnibus Budget Reconciliation Act of 1987 (OBRA 87) modified the Employee Retirement Income Security Act of 1974 to restrict the allowable interest rate assumptions a plan can use to calculate its liabilities to a corridor (or range) of rates 10 percent below or above a weighted 4-year average in the 30-year U.S. Treasury bond rate (see fig. 2.1). This range will be less than 2 percentage points as long as the weighted 4-year average 30-year bond rate is less than 10 percent. The range of allowable rates is set monthly by the Secretary of the Treasury and became effective for plan years beginning after December 1987.

The allowable range of rates restricts a sponsor's ability to influence the calculation of its plan's liabilities. The interest rates used by the 44 plans on their last pretermination reports to IRS (before the allowable range restrictions took effect) varied from 6 to 12.36 percent. Calculated plan liabilities could be twice as large using the 6-percent rate rather than the 12.36-percent rate.

<sup>&</sup>lt;sup>6</sup>During periods of steadily rising interest rates, estimated liabilities could fall between the filing with IRS and termination, providing PBGC with what might be called a "hidden asset."

<sup>&</sup>lt;sup>7</sup>The portion of OBRA 87 that addresses pension issues is called the Pension Protection Act.

The restriction on the allowable interest rates limits the ability of plan sponsors to reduce their plan's apparent liability by using excessive interest rates. However, even with the restriction, plan liabilities estimated using rates at the top and bottom of the range can vary by 40 percent.



Source: PBGC and IRS.

Limiting interest rates has both desirable and undesirable effects on PBGC. The restriction on allowable interest rates eliminates plans' ability to artificially reduce the level of reported liabilities by using excessively high interest rates. This is desirable. However, plans that formerly used interest rates below the bottom of the allowable range will have lower liability

estimates. This could reduce the contribution the sponsor makes to the plan and could increase the hidden liability in the plan, should it terminate.

The recent trend of declining interest rates makes the interest rate at the bottom of the corridor higher than the interest rate used by PBGC. As a result, the liabilities calculated by PBGC for currently terminating underfunded plans are larger than those calculated by the plans' sponsors, other assumptions being identical.

### Mortality Assumptions Have Smaller and Opposite Effect

Plan sponsors may select mortality rates from one of several standardized tables or may develop mortality rates based on actual plan experience. PBGC uses a specific table that contains relatively high mortality rate assumptions. The higher the mortality rate assumptions, the shorter will be the participants' assumed life expectancies, and the lower will be the calculated plan liabilities. Because of data limitations, we could only determine how the use of PBGC mortality assumptions would affect 34 plans.<sup>8</sup>

Of these 34 plans, 1 used the same mortality assumptions PBGC uses, and 33 used mortality rates that assume the participant will live longer than do the rates used by PBGC. The plan liabilities calculated using PBGC mortality rates will be lower for these 33 plans than the liabilities calculated using the plan rates, if all other assumptions are identical.

On average, converting to PBGC mortality rates in the 33 plans lowered their calculated liabilities by 5 percent.  $^{10}$  The reduction in liabilities ranged from 1 to 10 percent.

### Lower Retirement Age Assumptions Increase Liabilities

We did not measure the specific effects of changes in the retirement age assumptions because we lacked the data to do so. However, actuarial theory indicates lower retirement ages generally result in higher plan

<sup>&</sup>lt;sup>8</sup>Eight plans used an all encompassing "other" category that did not allow comparison with PBGC's mortality table. Two plans did not indicate which mortality table they used.

<sup>&</sup>lt;sup>9</sup>We had no data on the number of plan participants by sex, so we compared the mortality rates only for men, even though many plans specified a different rate for women.

<sup>&</sup>lt;sup>10</sup>The effect of using different mortality rate assumptions varies by the age of the plan participant. We used the adjustment factor applying to a participant who was 15 years younger than the retirement age specified by the plan to adjust the liabilities for active participants and the factor applying to a participant at the specified retirement age to adjust liabilities for retirees.

liabilities because the participant receives benefits for a longer period and the benefits are usually not fully reduced on an actuarial basis.<sup>11</sup>

In commenting on a draft of this report, PBGC officials said that each year of difference between the assumed and actual retirement age can increase plan liabilities for nonretired workers by 10 to 15 percent, if the plan provides fully subsidized early retirement benefits and supplements pensions to the eligibility age for Social Security benefits. They also told us that the difference between the plan actuary's assumption and the assumptions in PBGC's regulations has amounted to as much as 6 years in some major terminations. The payment of subsidized early retirement benefits at younger-than-assumed ages is a significant source of hidden liability, according to PBGC.

Sponsors experiencing financial difficulties often try to downsize their operation. They accomplish this, in part, by encouraging eligible workers to retire, sometimes by relaxing early retirement constraints. In addition, workers who lost their jobs because their employers went out of business or closed facilities tend to take their pension benefits at the earliest possible age. These early retirements raise both plan and hidden liabilities as well. To reduce hidden liabilities from differences in this assumption, a lower retirement age, such as the earliest age of eligibility for early retirement benefits, could be used as the retirement age assumption.

# Changes in More Than One Assumption

Do sponsors of plans headed for termination liberalize all actuarial assumptions to reduce the plan's apparent liabilities and contribution requirements? Our evidence suggests not. Twenty-seven plans changed their interest rate assumptions after 1981, seven of them also changed either the retirement age or mortality rate assumptions. No plan changed all three assumptions. Only six plans changed two assumptions in the same year, and, for five of these plans, one change decreased liabilities while the other increased them. The sixth plan changed two assumptions in each of two consecutive years. In 1984, both changes increased the plan's calculated liabilities and, in 1985, both changes reduced them.

However, a plan does not have to change its assumptions to liberalize them. Not changing actuarial assumptions when it is prudent to do so (for example, in periods of falling interest rates or sustained

<sup>&</sup>lt;sup>11</sup>Benefits are fully actuarially reduced when the present value of the stream of lifetime benefits is the same when benefits are first taken early as when first taken at the normal retirement age.

earlier-than-assumed retirements by plan participants) can have the same effect as making inappropriate changes.

### Evidence of Hidden Liabilities in Ongoing Plans

We studied the annual filings of 17,253 large (100 or more participants) defined benefit pension plans for the 1987 plan year to estimate the level of hidden liabilities from actuarial assumptions in ongoing plans. <sup>12</sup> These plans reported assets of \$596 billion and liabilities of \$411 billion. Reported assets exceeded reported liabilities by 45 percent on average. However, 16 percent (2,784) of these plans reported that they were underfunded by an aggregate \$14 billion.

We made three adjustments for interest rates used by the plans and one for the retirement age assumption used. We could not make an adjustment for the mortality rate because IRS does not include this variable on its data tape. The interest rate adjustments were to the rate used by the plan minus 1 percentage point, to a common 8-percent interest rate (the average 1987 plan interest rate), and to PBGC rates in effect in January 1987. The retirement age adjustment lowered the reported retirement age by 1 year.

### **Adjusting Interest Rates**

Lowering interest rates by 1 percentage point shows how sensitive plan liabilities are to the interest rate assumptions. Because this adjustment lowers interest rates for all plans, the calculated liabilities of all plans will increase. This adjustment increases aggregate liabilities by \$58 billion (from \$411 billion to \$469 billion), or 14 percent. (See table 2.2.) Unfunded liabilities nearly double (from \$14 billion to \$27 billion), and the number of underfunded plans increases by 65 percent (from 2,784 to 4,583). More than 25 percent of all large plans would be underfunded if they lowered their interest rate assumption by 1 percentage point.

<sup>&</sup>lt;sup>12</sup>We used the 1987 data file because accrued liabilities, as calculated by pension plans, are not coded on the files for more current years. Labor added this liability data to the 1988 file but had to impute liabilities for about 40 percent of the cases.

Table 2.2: Effect on Liabilities of Ongoing Large Plans From Changing Actuarial Assumptions

Dollars in billions

Type of assumption change	Number of underfunded plans	Percent change in number of underfunded plans from base case	Total liabilities	Total unfunded liabilities	Percent change in unfunded liabilities from base case
Base case (plan assumptions)	2,784	•	\$411.5	\$14.0	•
Plan rate minus 1 percent	4,583	64.6	469.4	26.7	90.9
Common interest rate (8%)	2,691	-3.3	414.5	16.5	18.2
PBGC rates (Jan. 1987)	4,272	53.4	466.4	26.2	87.3
Plan retirement age minus 1 year	3,525	26.6	435.5	17.9	28.0

Note: There are 17,253 total plans with \$595.6 billion in total assets.

Using a common 8-percent interest rate assumption suggests what happens if all plans are forced to use the same rate. Plans that were using an interest rate greater than 8 percent would experience an increase in calculated liabilities because of the decline in interest rates. Those using a rate lower than 8 percent would experience a decrease. These effects are largely offsetting in the aggregate. This adjustment increases total liabilities by \$3 billion and unfunded liabilities by \$2.5 billion. The number of underfunded plans falls by about 3 percent.

Adjusting plan interest rates to PBGC rates in effect in January 1987 increases total liabilities for these large plans by \$55 billion, or 13 percent. Unfunded liabilities in these plans nearly double to \$26 billion. The number of underfunded plans increases more than 50 percent to 4,272.

# Adjusting the Retirement Age Assumption

Because each plan has its own retirement pattern, it is difficult to determine if the reported retirement age accurately reflects current retirement patterns. For illustrative purposes, we assumed that every plan overstated its actual average retirement age by 1 year. Our adjustment would increase plan liabilities by \$24 billion (6 percent) and unfunded liabilities by \$4 billion (28 percent). The number of underfunded plans would increase to 3,525.

<sup>&</sup>lt;sup>a</sup>Percent changes were calculated using unrounded numbers.

### Shutdown Benefits Are Not Well Funded

Hidden liabilities occur not only because of differences in actuarial assumptions used by plans and PBGC but also because plan participants retire earlier than planned. Hidden liabilities are especially sensitive to shutdown benefits because these benefits are not well funded. For the plans we studied, the first payment to amortize the increased liability was not due until 8-1/2 months after the end of the plan year in which the shutdown occurred. Because plans often terminate shortly after shutdown benefits begin, sponsors do not have time to fund the benefits, and PBGC receives a hidden liability.

Shutdown benefits are poorly funded because they are not fully valued by plan actuaries when calculating the plan's liabilities. Facility closings, which trigger the payment of shutdown benefits, are assumed by plan actuaries to have a small probability of occurring. When calculating a plan's liabilities, the actuary usually weights the liability from shutdown benefits by an estimate of the probability that the shutdown will occur and includes only this weighted amount in the total. In PBGC's experience, this probability is often zero. Because the sponsors of the plans PBGC trustees are almost always in bankruptcy, the sponsor's facilities may have closed and shutdown benefits, if available, may be being paid when the plan terminates.

Shutdown benefits pose a problem for PBGC not only because they increase plan liabilities, but because the benefit payments drain plan assets. Shutdown benefit payments begin immediately after a facility closes, using assets accumulated to pay other plan benefits.

More than half (25) of the plans in our sample of 44 were steel plans, <sup>14</sup> and 10 of these had shutdown benefits in effect at the time the plan was terminated. PBGC actuaries do not routinely make a separate calculation of shutdown liability, so we were not able to ascertain the liability value of these shutdown benefits.

<sup>&</sup>lt;sup>13</sup>Increased plan liabilities from plant shutdowns are generally considered to be an experience loss of the plan. OBRA 87 provisions reduced the amortization period for this type of loss from 15 to 5 years, beginning with the 1988 plan year. OBRA 87 also required that contributions be made quarterly. Both these provisions will improve the funding of shutdown benefits.

<sup>&</sup>lt;sup>14</sup>We defined steel plans as plans whose sponsors had a Standard Industrial Code (SIC) between 3300 and 3499. These codes include companies in the primary metal and fabricated metal product industries. We did not include companies in the machinery industry (SICs from 3500 to 3599) (four plans) or mining industry (SICs from 1000 to 1199) (two plans) in our list of steel plans, even though the names of the mining companies indicated they were integrated with a steel producing company. One of the mining plans reported shutdown benefits.

PBGC has long contended that shutdown benefits are a major source of claims against the agency. A 1991 internal PBGC study suggested that shutdown benefits may have accounted for more than \$500 million, or about 10 percent, of PBGC's \$5.1 billion gross liabilities and more than 25 percent of its September 30, 1990, deficit of \$1.8 billion.

Shutdown benefits continue to pose a threat to PBGC. In the middle 1980s, when the sample of plans in this report were terminating, PBGC's greatest exposure was concentrated in troubled plans from the steel industry—these plans account for almost all the shutdown liabilities PBGC has incurred. PBGC's exposure is more diverse now, but a large portion of its currently troubled plans are in industries with shutdown-type benefit provisions—the steel, automobile, and tire and rubber industries.

### Other Factors That Can Increase Hidden Liabilities by Increasing Plan Liabilities

Two factors that can increase plan liabilities between the valuation date for the Form 5500 and the date of plan termination are the benefit accruals of plan participants and the increase in benefits due to the passage of time. Plan participants who are still working earn additional entitlements because of the additional time worked and, perhaps, because of higher earnings as well. We did not have the data necessary to estimate increased plan liabilities caused by benefit accruals. The change in liabilities due to passage of time has three components. First, the liabilities of participants who have not retired will increase because their future benefits will be discounted over a shorter period of time. Second, the liabilities of retired participants will decrease, even though their future benefits, too, are discounted over a shorter period, because of benefits received. Third, the liabilities for participants who retire during the passage-of-time period may increase or decrease.

We calculated the passage-of-time effect for 41 plans in our sample. We did not have benefit payment data for the other three plans. Our calculations assume participants kept their initial retired or nonretired status over the entire period. Because some participants will have retired during the period, our calculations will tend to overestimate the increase in liabilities from the passage-of-time effect. Plan liabilities increased in 16 plans (by \$9.3 million) because of the passage-of-time effect and decreased in the other 25 (by \$139.3 million). Aggregate liabilities fell because almost 80 percent of total plan liabilities in these 41 plans were retiree liabilities, and these liabilities were reduced for benefits received over the period.

Two other factors can increase plan liabilities immediately before plan termination—earlier-than-anticipated retirements of plan participants and benefit increases. The first is likely to have the greatest impact on PBGC because many sponsors experiencing financial difficulties will try to reduce the size of their labor force. One common method is to offer retirement incentives to those workers eligible for retirement. If the sponsor goes out of business, plan participants will apply for benefits at the earliest possible age. Early retirement benefits are often not fully actuarially reduced from the normal retirement benefit level. The greater the portion of plan participants who take early retirement, the greater the plan's liabilities will be.

Benefit increases, especially those giving credits for past service, also increase plan liabilities. PBGC can take up to 5 years to fully guarantee benefit increases, so it is partially protected against them. <sup>15</sup> Before the 1989 plan year, plan sponsors could take up to 30 years to fund the benefit increase, and after 5 years, PBGC would be liable for any unfunded portion. OBRA 87 strengthened funding rules for plans with unfunded liabilities and reduced the period these plans have to fully fund benefit increases.

### Asset Levels Fell in Most Plans

Hidden liabilities also occur because the value of plan assets falls. Total assets of the 44 plans fell about \$200 million between their last IRS filings and terminations, primarily because of benefit payments. PBGC received fewer assets from 35 of the 44 plans than reported on their last, pretermination annual filings with IRS. Four of these plans had no assets when they terminated. The payment of benefits to retirees and the failure of plan sponsors to make all required contributions to the plan were the primary reasons assets fell. Market losses also contributed to the decline in asset value because plans are required to use market prices to value their assets.

### **Benefit Payments**

Benefit payments reduce plan assets. We were not able to determine the benefit payments made by the 44 plans between the Form 5500 valuation date and the plan termination date. In our study of the passage-of-time

<sup>&</sup>lt;sup>15</sup>PBGC guarantees 20 percent of the benefit increase (or \$20 per month, if higher) after the end of each year for 5 years. If the increase is \$80 or less per month, the increase will be fully guaranteed in less than 5 years.

<sup>&</sup>lt;sup>16</sup>Missed contributions do not cause asset levels to decline. Benefit payments are primarily responsible for that. It is possible for a plan's annual required contributions to be less than its annual expenditures for benefit payments. Missed contributions mean that spent assets will not be replenished, or will not grow, as fast as intended.

effects on plan liabilities, however, we estimated that \$534 million had been paid to participants in 41 plans who were retired as of the Form 5500 valuation date. This amount does not include benefits paid to participants who retired between that date and the plan termination date nor does it include benefits paid to participants in three plans for which we did not have benefit payment data.

# Unpaid Contributions Exacerbate Underfunding

Sponsors experiencing financial difficulties often fail to make all required contributions to their pension plans. The missed contributions may have been legally postponed through the IRS waiver process or they simply may not have been paid. The \$200 million reduction in aggregate plan assets would have been \$45 million less if sponsors had made all contributions that arose during this period. The level of unpaid contributions increased during this period for 33 plans and declined for 10. (See table 2.3.) One plan paid all required contributions. We determined the change in unpaid contributions by subtracting (1) the sum of the plan's funding deficiency reported on its last annual statement before terminating and (2) its reported waivers from its unpaid contributions at termination. 17

In more than half the plans in our sample (25), plan asset levels decreased between their last pretermination IRS filing and termination. At the same time, plan sponsors failed to make all required contributions. In eight of these plans, the asset loss was smaller than the increase in unpaid contributions, suggesting that plan asset levels would have increased had the required contributions been made. In the remaining 17 plans, the increase in unpaid contributions was only a portion of the decrease in plan assets. In these cases, assets levels would have fallen even if all required contributions had been made.

For ten plans, the level of unpaid contributions at plan termination was lower than reported on the last pretermination filing with IRS. However, nine of these plans had lower asset levels at termination than reported earlier. Without the additional contributions, the decline in assets in these nine plans would have been three times larger.

<sup>&</sup>lt;sup>17</sup>Our calculations assume that all waivers granted by the IRS become due and payable at plan termination. Waivers have not always been subject to this condition. If some of the waivers granted plans in our study were not subject to this condition, our calculations will underestimate the growth in unpaid contributions for the period between the last IRS filing and plan termination.

Table 2.3: Distribution of 44 Plans by Changes in Plan Asset Levels and Unpaid Contributions Between Last IRS Filing and Termination

	Ass			
Unpaid contributions	Decreased	Increased	Total Plans	
Decreased	9	1	10	
Increased	25	8	33	
The increase in unpaid contributions equals:				
All of the decrease in assets	8	•	•	
Some of the decrease in assets	17	•	•	
Remained the same	1	•	1	
Total	35	9	44	

### Unpaid Contributions Account for Sizable Portion of PBGC Claims

Unpaid contributions occur over a period of years, but in most plans are concentrated in the last few years before termination. Unpaid contributions almost doubled from \$66 million to \$128 million between the last IRS filing and termination for the 33 plans experiencing an increase in unpaid contributions. The unpaid contributions fell one-third, from \$628 million to \$418 million, over this same period for the 10 plans whose unpaid contributions declined.

Unpaid contributions for the 44 plans we studied accounted for \$546 million, or 20 percent, of the \$2,689 million in claims against the pension insurance program for the 1986-88 period. Only 1 of these 44 plans was not in arrears in its contributions at termination. For another plan, unpaid contributions accounted for the entire claim against the insurance program. The distribution of unpaid contributions as a percentage of the claims against PBGC is shown in table 2.4.

Table 2.4: Distribution of 44 Plans by Unpaid Contributions as a Percent of Claims Against PBGC

Unpaid contribution as a percent of claim	Number of plans	
0	1	
1-9	5	
10-19	6	
20-29	12	
30-39	4	
40-49	9	
50-74	3	
75-99	3	
100 or more <sup>a</sup>	1	

<sup>&</sup>lt;sup>a</sup>Unpaid contributions can exceed the claims against PBGC because PBGC does not necessarily guarantee all plan benefits.

Only 11 of the 44 plans made full or partial contributions for all years for which we have data. Thirty-one plan sponsors made no contributions in the year of their last, pretermination IRS filing. Eighteen of these sponsors did not make contributions for at least the last 2 years.

# Unpaid Contributions Not Due Until Termination

Not all of the unpaid contributions were due before termination. Some unpaid contributions were waived by IRS but not repaid when the plan terminated. We identified 22 plans that received waivers from IRS for \$45.6 million. Some of the remaining \$500 million in unpaid contributions were also not due before termination because, before the 1989 plan year, plans had 8-1/2 months following the end of the plan year to make contributions. Thus, the contributions for the current year and the previous year, if termination occurred less than 8-1/2 months after the end of that plan year, would not have been due yet if the plan had continued.

OBRA 87 made several changes to ERISA concerning the contributions waiver process. Before 1988, plans could receive five waivers in a 15-year period and could take 15 years to repay the waived contributions. Beginning with the 1988 plan year, plans can receive only three waivers in any 15-year period, and they have only 5 years to repay the waived contributions. OBRA 87 requires IRS to notify PBGC of, and give it an opportunity to comment on, any waiver requests that would increase the total waived funding amounts for a plan to \$1 million or more. Plans may now be required to provide a security if their total waivers exceed \$1 million. PBGC is satisfied with these improvements in the waiver process.

OBRA 87 also mandated that, beginning in 1992, contributions be made quarterly. This quarterly contribution requirement was phased in over the 1989-92 period. Plans that miss a contribution payment now are required to notify PBGC of their failure to contribute within 10 days of the contribution due date. OBRA 87 allows PBGC to place a lien on sponsor assets if unpaid contributions exceed \$1 million. These changes should reduce claims from unpaid contributions because PBGC will be aware of the smaller missed contribution earlier and able to apply pressure on the sponsor to make the contribution. Because our sample of plans was not affected by these OBRA 87 provisions, we did not attempt to determine if the provisions are working as intended.

# Other Possible Causes of the Decline in Assets

We did not measure other causes of asset loss in the 35 plans in detail, but these causes include market losses, inappropriate use of assets, and plan overvaluation of assets.

### **Market Losses**

Market losses of a plan's asset portfolio can occur at any time. In most cases, plan assets consist of stocks and bonds. The value of plan assets held in stocks is more likely to decline if there has been a strong decline in the stock market, such as the decline that occurred in October 1987. The particular makeup of a plan's stock portfolio, however, will determine if its gains and losses follow those of the market.

We found evidence that the stock market crash may have affected the value of assets for plans that terminated shortly after the October 19, 1987, stock market crash. <sup>18</sup> Of the 17 plans whose reduced asset levels could be partially attributable to increases in the plan's unpaid contributions, about half (8) terminated after the stock market crashed. We calculated that, on average, these 8 plans lost 88 percent of their assets from sources other than unpaid contributions. This compares with an average loss from other sources of 49 percent for the plans that terminated before October 19, 1987.

A special case of market loss involves plans' holdings of assets issued by their plan sponsor. ERISA allows plans to hold up to 10 percent of plan assets in stocks and other securities of their sponsors. Because most of the sponsors are in bankruptcy proceedings at termination, the value of their stocks and other securities is likely to have fallen relative to the value given on the plans' annual report. We did not measure how many plans held sponsor's securities in their portfolio.

# Inappropriate Use of Assets

Occasionally, a plan sponsor will use the assets of the plan for business expenses or for his or her own personal gain. Discussions with PBGC personnel indicate this is more likely to be a problem in small plans, where the sponsor has more personal control of the plan's assets, than in large plans, where the plan administrator is often an independent fiduciary. One

<sup>&</sup>lt;sup>18</sup>We conducted a study shortly after the October 1987 stock market crash to determine what effects it had on the assets of pension plans—Effect of the 1987 Stock Market Decline on Selected Large Pension Plans (GAO/T-HRD-88-21, July 12, 1988). We determined that by 1 year after the crash, most plans had recovered their market-caused losses. Plans that terminated before the anniversary of the crash had less time to recoup those losses.

large plan in our sample lost all its assets because the plan administrator made loans to the company, to himself, and to other parties.<sup>19</sup>

### **Overvaluing Assets**

Another possible reason plan assets might decrease between the plan's final annual report and PBGC's valuation at termination is that the assets were overvalued by the plan, according to PBGC. For example, assets might be valued at cost rather than market. Nonexistent assets might also be reported by the plan and later found to be missing by PBGC. This should not be a problem in large plans because they are required by ERISA to be audited by an independent accountant. We recently found serious problems in some of these audits, however.<sup>20</sup>

### PBGC Estimates of Its Hidden Liability Are Incomplete

PBGC attempts to estimate the size of the true liabilities it faces by adjusting the reported plan liabilities to its own interest rates and, in some cases, its own mortality rates. <sup>21</sup> It does not generally adjust liabilities for the earlier-than-anticipated retirements that would result from most plan terminations, nor does it adjust them for the reduction in assets plans are likely to experience or for the other factors we have discussed. Better measures of these liabilities will not, in themselves, reduce the potential claims against PBGC. They can only help PBGC refine its estimates of underfunding in the plans it insures.

### Conclusions

When a pension plan terminates with insufficient assets to cover its liabilities, PBGC is likely to absorb unfunded liabilities considerably greater than the plan reported on its most recent annual filing with the IRS. These hidden liabilities accounted for 37 percent of the claims against PBGC from the 44 plans in this study.

OBRA 87 put in place a number of reforms that will reduce the level of hidden liabilities found in this analysis. OBRA 87 restricted the range of

<sup>&</sup>lt;sup>19</sup>IRS discovered the loans and disqualified the plan as a result. Most of the loans were not repaid because the plan administrator died and the plan sponsor and the other companies receiving loans went bankrupt.

<sup>&</sup>lt;sup>20</sup>Employee Benefits: Improved Plan Reporting and CPA Audits Can Increase Protection Under ERISA (GAO/AFMD-92-14, Apr. 9, 1992).

<sup>&</sup>lt;sup>21</sup>PBGC uses Standard and Poor's COMPUSTAT II data base for much of this analysis because it is more current than the plans' IRS filings. However, this data base does not include all plans insured by PBGC and contains only limited data on pensions, which restricts PBGC's ability to accurately estimate termination liabilities it faces. When COMPUSTAT II data are not available, PBGC uses older Form 5500 data. In some circumstances, plan sponsors are required to provide PBGC with complete and current actuarial information, which it then adjusts to a termination basis.

Chapter 2 Hidden Liabilities Increase Claims Against PBGC

interest rates that plans can use when calculating their current liabilities. However, this range is not required to include the PBGC rates so plans and PBGC can still calculate different plan liabilities based on the use of different interest rates.

OBRA 87 also moved contributions to a quarterly payment schedule, required notification to PBGC of missed contributions, allowed PBGC to attach a lien on sponsors whose missed contributions exceeded \$1 million, and significantly tightened the IRS contribution waiver process. These provisions should reduce, but will not eliminate, the hidden liabilities caused by missed contributions.

PBGC currently attempts to estimate the hidden liability it faces by adjusting the liabilities reported by many plans to its own interest rates and sometimes to its mortality rates as well. It also tries to stay on top of developments of financially troubled sponsors. Our work shows the hidden liabilities facing PBGC arise from a number of causes. A primary cause is differences in actuarial assumptions used by the plans and PBGC, especially differences in interest rates. This difference occurs because plans are not required to estimate liabilities on a termination basis, the basis used by PBGC. Shutdown benefits, earlier-than-anticipated retirements, reductions in plan assets, and other factors can also cause hidden liabilities.

# PBGC Lacks Tools to Limit Claims

The Pension Benefit Guaranty Corporation has few tools to control its exposure to hidden liabilities. The premiums PBGC collects from a plan do not insure the plan against a specified and limited shortfall in plan assets. Rather, they insure the plan against any shortfall, up to the maximum guarantee times the number of plan participants, no matter how large. Plan sponsors with financial difficulties know that PBGC will protect the guaranteed pensions of their workers no matter how large the unfunded liabilities in their plans.

PBGC's inability to restrict claims against itself makes it subject to a moral hazard. Moral hazard is a term used to describe situations in which people or institutions insured against certain risks have an incentive to use less than optimal care to avoid those risks. Moral hazard surfaces when the penalties for undertaking risky behavior are too weak to prevent it from taking place. Plan sponsors experiencing financial difficulties are not only able to shift some of their liabilities onto PBGC, but have an incentive to do so because penalties for doing so are weak.

# Moral Hazard Adds to PBGC Liability

The shifting of liabilities onto PBGC can be done in several ways. When negotiating with employees over compensation, sponsors having financial difficulties can increase pension benefits¹ or relax early retirement penalties in lieu of increasing wages. The sponsor is allowed to fund such a benefit increase over a period of up to 30 years.² It then can use the wage savings for other business operations. If the business and plan survive, the plan sponsor will pay the participants their benefits. If the plan terminates after one or a series of benefit increases, PBGC ends up paying part or all of the unamortized liability.

Other methods a plan sponsor can use to shift its pension liabilities onto PBGC are to (1) forgo making its required contribution to the pension plan either legally through IRS waivers or illegally, (2) spin off an underfunded

Benefit increases are primarily a problem in flat benefit plans, which pay a benefit based on a specified dollar amount multiplied by years of service with the plan sponsor. Under current law, flat benefit plans are forbidden from anticipating benefit increases they are not already committed to providing. These plans, which tend to be large negotiated plans, experience a large, sometimes dramatic, increase in liabilities each time the specified dollar amount is raised. The 26 flat benefit plans in our sample were responsible for \$2.4 billion of the \$2.7 billion in PBGC claims. We did not calculate what portion of the \$2.4 billion was caused by recent benefit increases.

<sup>2</sup>The Omnibus Budget Reduction Act of 1987 added a provision to the Internal Revenue Code (paragraph 412(1)) that reduces this funding period when the benefit improvement increases plan underfunding. The provision was effective beginning with the 1989 plan year.

plan,<sup>3</sup> and (3) use the plan's assets to pay business expenses. Each of these actions subjects the sponsor to an interest charge or penalty, but, if the business goes bankrupt, it may not have enough assets to pay the interest or penalty. In each instance, PBGC continues to insure the pensions of plan participants. PBGC also insures these pensions if the sponsor fails to pay its premiums for PBGC coverage.

### PBGC's Tools to Deal With Moral Hazard

At present, PBGC has two tools for dealing with moral hazard—moral suasion and termination of the plan. Moral suasion is another term for "friendly" persuasion. For example, PBGC uses moral suasion by annually publishing a list of the top 50 underfunded pension plans. PBGC hopes that public identification of large underfunded plans and discussions with troubled sponsors will persuade them to take corrective action to ensure the viability of their plans. To facilitate this, PBGC has recently created a Corporate Finance and Negotiations Department to identify and work with sponsors whose plans pose a risk to the agency. Should negotiations fail and the unfunded liabilities of the plan continue to grow, PBGC's only available alternative to letting the unfunded liabilities of the plan grow is to terminate the plan, but PBGC can do so only under the conditions listed on page 12.

Even when PBGC can do so, it tries to avoid terminating a plan because such action is onerous to all involved. For example:

- PBGC incurs a claim that it will have to pay.
- Participants still working under the plan stop accruing benefits. As a result, their future benefits will be lower than if the plan continued.
- Retirees whose benefits exceed the maximum guarantee level, whose benefits were recently increased, or who are receiving supplemental benefits may have their benefits reduced.
- The plan's sponsor may spend time and money to try to protect its own assets from court claims filed by PBGC on behalf of the plan for missed contributions and on behalf of itself for the recovery of the unfunded liability for guaranteed benefits. In addition, the sponsor may be forced into bankruptcy if not already there.

<sup>&</sup>lt;sup>3</sup>In a spinoff, a sponsor divides its plan into two or more plans, usually when it is selling an operating component. Often the plan that is retained is well funded, and the plan that goes with the sold component is less well funded. If the underfunded new plan is supported by a financially troubled or weak sponsor, PBGC's risk increases.

#### Observations

PBGC has few tools for dealing with distressed underfunded plans whose financial position is deteriorating. Although any action aimed at reducing the moral hazard should reduce PBGC's exposure, the costs to other players—plan participants, plan sponsors, and the federal government—must also be considered. For example:

- If legislation were passed to require better plan funding, federal corporate income tax revenues would decline and some sponsors might have to terminate their plans if they could not satisfy the new funding requirements.
- If PBGC were allowed to require a security from all underfunded plans, the sponsors might find it difficult to obtain the credit necessary to keep their businesses in operation.
- If PBGC were allowed to restrict the liabilities it would assume, plan participants, the group PBGC was established to protect, might lose some currently available benefits upon plan termination.
- If PBGC were allowed to restrict plan improvements that increase plan liabilities, plan participants would lose benefit improvements, but more importantly, the ability of management and labor to negotiate freely in their own best interests would be curtailed.

The cost of not taking action to address PBGC's moral hazard problem is that financially troubled sponsors will likely continue to behave in a manner that increases PBGC's potential claims. PBGC is concerned that rising claims may lead to the need to increase premiums, in effect forcing sponsors of well-funded plans to pay for the broken promises of sponsors who did not adequately fund their plans. If premiums are not raised sufficiently or if enough sponsors of well-funded plans terminate their defined benefit plans, PBGC will eventually have to turn to the American taxpayer if it is to continue to meet its benefit obligations.<sup>4</sup>

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 $<sup>^4</sup>$ PBGC currently has only a \$100 million line of credit with the U.S. Treasury. The Congress would have to authorize additional funds for PBGC should the need arise.

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# **Interest Rates**

Interest rates play a major role in determining the size of the calculated liabilities of pension plans and of the Pension Benefit Guaranty Corporation. This appendix explains how the interest rate works in calculating liabilities, how interest rate changes affect the size of a pension plan's calculated liabilities, and how PBGC determines its interest rates.

### Interest Rates and Liability Estimates

Pension liabilities are calculated using a number of actuarial assumptions. As demonstrated in chapter 2, calculated liabilities are most sensitive to the value of the interest rate assumption and will be lower for higher interest rates.

At retirement, a plan participant will be entitled to a stream of benefits, generally payable monthly until he or she dies. Assume that the money the plan sponsor sets aside to pay this stream of benefits does not earn any interest. The liability of the plan to that participant would be the monthly benefit multiplied by the expected number of months from retirement to death. If the plan sponsor had set aside the necessary amount of money, or more, to pay all expected benefits to that participant, the plan would be fully funded, in regard to that participant. If insufficient money was set aside, the plan would be underfunded, and the plan sponsor would have to make additional contributions to fully fund the plan.

Plan assets do earn interest, however. A plan with a given level of assets could pay a higher benefit for a given period if interest rates were higher rather than lower. Alternatively, with higher interest rates, it could pay a given level of benefits for a longer period. Another effect of a higher interest rate is to reduce the level of assets needed to pay a given monthly benefit for a fixed period of time. This last effect is why plan liabilities, the level of assets needed to pay a stream of monthly benefits for an assumed period, fall as the interest rate increases.

### **PBGC Interest Rates**

PBGC uses four interest rates when calculating the liabilities in pension plans it trustees. It uses an "immediate" rate to value the liability for retirees. For other plan participants, it uses three lower deferred interest rates whose values depend on the immediate rate and on the number of years until a participant is expected to retire.

PBGC interest rates, when used in conjunction with its mortality rate assumptions, are designed to yield a liability estimate approximately equal

Appendix I Interest Rates

to the current market price of an annuity that the plan could purchase to replace the benefits promised to the plan's participants.

#### **Immediate Rate**

The immediate rate is based on a quarterly survey of life insurers conducted for PBGC by the American Council of Life Insurance. The survey reports life insurers' quotations or prices (net of administrative expenses) for group annuity contracts as of a given date for both sexes and a variety of ages.

From the survey data, the average single-premium price is calculated for 65-year-old males. PBGC then uses its mortality rates to determine what interest rate would yield this same annuity price for 65-year-old males. This yields the "unloaded" interest rate (or interest rate net of administrative expenses).

PBGC adjusts (reduces) the unloaded interest rate for administrative expenses. The reduction factor varies from about 0.5 percentage points when the unloaded interest rate is low (about 7 to 7-1/2 percent) to about 0.75 percentage points when the unloaded interest rate is high (about 11 percent). PBGC then rounds the resulting interest rate to the nearest 0.25 percent to get its "immediate" rate.

The American Council survey is conducted quarterly, but PBGC can adjust its interest rates monthly. To determine rates for the intervening months, PBGC uses a linear equation with the immediate rate as the dependent variable and Moody's long-term investment-grade corporate bond yield to maturity as the independent variable. The coefficients are determined from a regression of the immediate rates, developed from the survey, on Moody's corporate bond yield. The calculated immediate rate is then rounded to the nearest 0.25 percent.

#### **Deferred Rates**

The immediate rate is used to value liabilities for the time a participant will be receiving benefits. The rate used for the first 7 years before retirement is the immediate rate less 0.75 percentage points. A rate of 2 percentage points less than the immediate rate applies to the 8 years before that, and a flat 4-percent rate applies to 15 years before the assumed retirement age.

<sup>&</sup>lt;sup>1</sup>PBGC originally calculated its interest rates for a range of ages, assuming the participant mix was 80 percent male and 20 percent female. The calculated interest rates fell into a narrow band that included the rates calculated for 65-year-old males. For simplicity, the PBGC now calculates the rate for 65-year-old males and applies that rate to all groups.

Appendix I Interest Rates

The relationships between the immediate rate and the deferred rates were established when PBGC began issuing rates on a prospective basis in December 1980. Before that, the deferred rates were derived from the American Council of Life Insurance survey in a manner similar to the immediate rate.

Some experts have expressed concern that PBGC deferred rates may be too low, with the result that calculated liabilities are too high. Benefit experts indicate that sponsors of terminating young plans (plans where many participants are more than 15 years from retirement) may have to make large contributions at termination because most plan sponsors do not use interest rates as low as 4 percent when funding their plans. When the plans were ongoing, the sponsors had to use higher interest rate assumptions, which lowered calculated plan liabilities and restricted allowable contributions.

A PBGC actuary agreed that the deferred rates may be low, but argued that the impact of these inaccuracies will not be significant because younger participants have smaller accrued benefits and a longer deferral period than older participants.

### How Changing Interest Rate Assumptions Affect Liabilities

Changes in interest rate assumptions affect the value of a plan's liabilities. If assumed interest rates fall, plan liabilities rise. If these rates increase, liabilities decrease.

PBGC is allowed to change its interest rates monthly, so its rates are very sensitive to changes in market rates. Plan rates are much more stable because plan liabilities are valued only once per year and plan sponsors like to be able to anticipate what their pension contribution costs will be. If plans adjusted their interest rate assumptions every year to current market rates, the plans' sponsors could be subject to massive contribution requirements (if interest rates fell substantially from the previous year) or not allowed to make a contribution (if interest rates rose substantially).

The stability in plan interest rate assumptions is allowed because plans are required to use the interest rate assumption that best reflects the anticipated long-term experience of the plan. If the plan sponsor or the plan actuary believes long-term interest rates differ from current market rates, he is allowed to use the anticipated long-term rate in his calculations.

Appendix I Interest Rates

Declines in interest rates increase PBGC liabilities. The lower interest rates reduce the returns on PBGC's asset portfolio, increase the calculated liabilities from plans it has already trusteed, increase the number of plans that are underfunded on a termination basis, and raise its potential liabilities from ongoing plans that were already underfunded on a termination basis.

# Comments From the Pension Benefit Guaranty Corporation and Our Response



Office of the Executive Director

July 24, 1992

Mr. Joseph Delfico Director Income Security Issues United States General Accounting Office Washington, DC 20548

Dear Mr. Delfico:

Thank you for the opportunity to comment on GAO's draft report, "Pension Plans: Hidden Liabilities Increase Claims Against Government Insurance Program" (105635).

The draft report does an excellent job of identifying and describing the key factors that cause reported pension plan underfunding to so significantly understate the PBGC's true exposure to claims. The draft report also notes that the PBGC has few tools to control this exposure short of plan termination and that we could benefit from some additional tools. We heartily agree.

In reviewing the draft report, we identified several areas, primarily technical ones, where we had some suggested changes. We have met with your staff on these matters and have come to agreement on virtually all of our suggestions.

There are two subjects that we have not addressed formally with your staff which we would like you to consider.

#### Data

The report notes data inadequacies at numerous places, for example:

- o "We had insufficient data to perform a similar analysis for the retirement age assumption." (p. 24)
- o "We use the 1987 data file because accrued liabilities, as calculated by pension plans, are not coded on the files for more current years." (p. 25, footnote)
- o "... but given the limited data available, we were unable to determine how much shutdown benefits contributed to hidden

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Now on p. 17.

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Now on p. 17.

liabilities or to the total claims against PBGC." (p. 25)

The PBGC is currently working with the other ERISA agencies to improve the completeness and currency of the information that our actuaries and analysts need to properly and accurately assess our exposures and risks. We would welcome GAO's support and assistance to the Administration in making any necessary changes.

#### Report "CONCLUSIONS"

The report describes very well the problems that the PBGC faces, the sources of its Hidden Liabilities, and the inadequacies of the tools available to the PBGC under current law to deal with them. The costs of remedial legislation also are accurately described. The alternative to incurring those costs is not, however, spelled out as clearly as it might be.

The PBGC's legislative program will eliminate the conditions that encourage the underfunding that you have identified in the report. The program reduces the PBGC's risk of loss by reforms in three areas—by increasing required funding to levels that will eliminate the Hidden Liabilities over a reasonable period; by guaranteeing future benefit increases only after past promises have been paid for; and by clarifying our position in bankruptcy so that creditors and shareholders will treat pension underfunding as a real corporate obligation. If our remedial legislation is not enacted, the liabilities "put" to the program will be higher and premiums will have to increase.

The ultimate response by the sponsors of well-funded plans to repeated premium increases and to the open-ended call on corporate resources could be devastating to the PBGC. The 80 percent of plan sponsors whose plans constitute little exposure to the PBGC will continue to pay for the decisions of others when their industries get in trouble.

The 80 percent may well elect to leave this voluntary pension system as about 10 percent of our insured plans have each year for the last several years. Ever escalating premiums could accelerate this trend, leaving only underfunded plans. Such an "en masse" exodus could ultimately deny PBGC a base of premium payers, resulting in a general taxpayer bailout.

Several independent studies support the PBGC's concern about a possible premium payer exodus. A recent <u>Economic Report</u>, published by the Federal Reserve Bank of Atlanta, points out that if the cost of deposit insurance makes a bank unprofitable, the bank's only option is to relinquish its charter—a drastic move by the bank. However, a company can respond easily to the cost of pension insurance by switching from a defined benefit plan to a defined contribution plan. The consequence, according to the Report, is that PBGC has much less latitude to assess high premiums

Appendix II Comments From the Pension Benefit Guaranty Corporation and Our Response

against healthy pension plans in order to subsidize weak, underfunded ones than the FDIC does in making strong banks subsidize marginal banks.

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A recent study of the PBGC by Professors Zvi Bodie of the Boston University School of Management and Robert Merton of Harvard University's Graduate School of Business concludes that "...overcharging sponsors of well-funded plans in order to subsidize the underfunded plans of financially-distressed firms might cause financially healthy sponsors to terminate their defined benefit plans. Ultimately, the United States could be left with bankrupt defined benefit plans with benefits financed directly by taxpayers."

Thus, the report's "Conclusions" should discuss the costs of not passing the legislation. If those receiving the PBGC subsidy do not bear some or all of the costs, all plan sponsors will be required to bear higher costs for an insurance program that for most is already overpriced. And if these costs are too high, there will be an exodus of premium payers from the system and the tampayer may have to pay the bill.

We hope that the GAO's final report will reflect our comments. Please do not hesitate to contact us to discuss these matters further.

Sincerely,

**Éxecutive Director** 

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Appendix II Comments From the Pension Benefit Guaranty Corporation and Our Response

#### Our Response

PBGC has a problem obtaining timely, accurate, and sufficient data to assess the exposure and risks it faces. The IRS Form 5500 is the primary data collection instrument the federal government has. This form has several shortcomings that make it less than ideal for PBGC usage—as pointed out in chapter 1, it does not contain estimates of the plan's termination liabilities, nor can PBGC accurately estimate them from data provided; the data are not current, they can be more than 18 months old before IRS receives them and PBGC must wait even longer; and, the data are not always accurate, complete, and legible. An alternative data source, the Securities and Exchange Commission Form 10-K, is more timely than the Form 5500, but it contains fewer pension data items and is not available for all plans.

The timeliness issue was not so critical for this study as it is for PBGC because our analysis was retrospective. The availability of Forms 5500 did dictate which years of plan termination we included in the study, however. One of the major components of hidden liability is the different actuarial assumptions used to calculate plan liabilities. This component would be smaller if plans reported termination liabilities.

PBGC can benefit from timely access to plan information to assess its risk and exposure from unfunded liabilities because these liabilities tend to increase as plans approach termination. Proposing mechanisms to provide PBGC such access, however, is beyond the scope of this report.

At the end of chapter 3 in a section titled "Observations," we added a discussion of the costs of not taking action to address PBGC's moral hazard problem.

# Major Contributors to This Report

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## Related GAO Products

Improving the Financial Condition of the Pension Benefit Guaranty Corporation (GAO/T-HRD-92-60, Sept. 25, 1992).

Financial Condition of the Pension Benefit Guaranty Corporation (GAO/T-HRD-92-52, Aug. 11, 1992).

Employee Benefits: Improved Plan Reporting and CPA Audits Can Increase Protection Under ERISA (GAO/AFMD-92-14, Apr. 9, 1992).

Financial Audit: Pension Benefit Guaranty Corporation's 1991 and 1990 Financial Statements (GAO/AFMD-92-35, Mar. 2, 1992).

Financial Audit: System and Control Problems Further Weaken Pension Benefit Guaranty Fund (GAO/AFMD-92-1, Nov. 13, 1991).

Defined Benefit Pensions: Hidden Liabilities From Underfunded Plans and Potential New Obligations Confront PBGC (GAO/T-HRD-92-6, Oct. 31, 1991).

Effect of the 1987 Stock Market Decline on Selected Large Pension Plans (GAO/T-HRD-88-21, July 12, 1988).

Pension Plans: Government Insurance Program Threatened by Its Growing Deficit (GAO/HRD-87-42, Mar. 19, 1987).

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